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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/718,095 Filing Date: November 20, 2003

Appellant(s): FRANKLIN, BRENT DAVID

Wayne P. Bailey (Reg. No. 34,289) For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 12/26/07 appealing from the Office action mailed 8/31/07.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

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(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,366,220 ELLIOTTT 4-2002

Grimes, Rob. "Smart cards help operators build better customer relations", Nation's Restaurant News, March 30, 1998, No. 13, Vol. 32, pg. 54

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# (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 6-8 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimes, "Smart Cards Help Operators Build Better Customer Relations", Nation's Restaurant News, March 30, 1998, No. 13, Vol. 32, pg. 54 in view of Elliott, U.S. Patent No. 6,366,220.
- 3. **As per claims 6 and 15**, Grimes discloses a method and system for using dining preferences to generate an order, comprising:

physically presenting, by a customer, a smart card to an employee of a restaurant (Grimes: paragraph 0012);

reading, by a data processing system, customer dining preferences for the restaurant from a memory in the smart card (Grimes: paragraphs 0002; 0012), wherein the memory includes dining preferences for food items for a set of different and unrelated restaurants (Grimes 0002; 0012; The Examiner notes, the phrase "provide restaurants with a host of customer preference data" suggests dining preferences for a plurality of restaurants including different and unrelated ones. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the dining preferences of Grimes to have included dining preferences for

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a set of different and unrelated restaurants for the advantage of conveniently storing preferences for all restaurants that a user plans to visit on one card.), wherein the dining preferences (i) are customer- portable between the set of different and unrelated restaurants (Grimes: paragraph 0005), (ii) are read from the smart card (Grimes: paragraph 0012), and (iii) are stored in association with a restaurant name and a food item name also stored in the smart card (Grimes: paragraph 0012; The restaurant recognizes the food item name for the particular restaurant when the smart card is read by the reader.);

wherein the smart card further comprises a communications interface (Grimes: paragraphs 0002; 00012; The Examiner notes, it is inherent that the smart card has a communications interface that is used in connection with the reader.), wherein the communications interface allows for the dining preferences to be read from the memory by the data processing system at the restaurant for use in generating the food order (Grimes: paragraph 0012), wherein the communications interface reads the dining preferences for the restaurant from the smart card and writes the dining preferences for the restaurant to the smart card (Grimes: paragraphs 0002-0003; 0012).

4. Grimes does not disclose <u>reading information from a card using radio frequency signals</u>; a radio frequency transceiver that reads and writes information to the card; displaying, by the <u>data processing system</u>, the dining preferences for the restaurant on a display for order <u>verification by both the employee and the customer</u>, wherein other dining preferences maintained in the smart card for other restaurants are not displayed; generating, by the data processing system, the order using the dining preferences.

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5. Elliott discloses reading information from a card using radio frequency signals (Elliott: col. 5, lines 24-27; a radio frequency transceiver that reads and writes information to the card (col. 5, lines 24-33; The Examiner notes, RF tag 104 receives and sends information.); displaying, by the data processing system, the dining preferences for the restaurant on a display for order verification by both the employee and the customer (Elliott: col. 8, lines 24-25; col. 9, lines 10-12), wherein other dining preferences maintained in the smart card for other restaurants are not displayed (Elliott: col. 8, lines 24-25; col. 9, lines 10-12); generating, by the data processing system, the order using the dining preferences (Elliott: col. 8, lines 35-45).

- 6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method and system of Grimes to have included <u>reading</u> information from a card using radio frequency signals; a radio frequency transceiver that reads and writes information to the card as disclosed by Elliott for the advantage of transferring information from a card via a signal as opposed to physically swiping a card using a card reader.
- 7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method and system of Grimes to have included <u>displaying</u>, by the <u>data processing system</u>, the <u>dining preferences</u> for the restaurant on a <u>display for order</u> verification by both the employee and the customer, wherein other dining preferences maintained in the smart card for other restaurants are not <u>displayed</u>; generating, by the <u>data processing</u> system, the order using the <u>dining preferences</u> as disclosed by Elliott for the advantage of assuring a customer that an accurate order is being processed.

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8. **As per claim 7 and 18**, Grimes in view of Elliott discloses the method and system of claims 6 and 15 as described above. Grimes further discloses wherein the smart card further comprises a processor embedded within the smart card (Grimes: paragraph 0002).

- 9. **As per claims 8 and 17**, Grimes in view of Elliott discloses the method and system of claims 6 and 15 as described above. Grimes does not disclose <u>initiating the generating step after a user input confirming the dining preferences for the order.</u>
- 10. Elliott discloses initiating the generating step after a user input confirming the dining preferences for the order (Elliott: col. 8, lines 25-29; The Examiner interprets the customer choosing to order from the default menu to be confirming the dining preferences for the order.).
- 11. **As per claims 14 and 16**, Grimes in view of Elliott discloses the method and system of claims 6 and 15 as described above. Grimes further discloses wherein the dining preferences are generated by a terminal at the restaurant and stored in the smart card at the restaurant (Grimes: 0013; Information is updated and stored on the smart card during payment after the meal. Therefore, preference information is generated and stored on the smart card at the restaurant.).

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### (10) Response to Argument

Appellant Argument I

In reference to the Examiner's statement of modifying the dining preference teachings of Grimes to include dining preferences for a set of different and unrelated restaurants as stated in the final rejection, Appellant submits, "[The] Examiner has failed to properly establish a prima facie showing of obviousness by such 'obvious to modify' assertion, as the Examiner merely provides subjective opinion without supporting objective evidence to substantiate such subjective opinion." Appeal Brief for Appellant, pg. 9.

Grimes teaches a smart card that stores diner information and meal preferences (Grimes: paragraph 0012). Grimes further teaches the smart card provides restaurants with a host of customer preference data (Grimes: paragraph 0013). Thus, Grimes teaches and/or suggests dining preferences for a plurality of restaurants. One skilled in the art would recognize that each restaurant is different from one another. Two similar restaurants still differ according to criteria such as restaurant location, management personnel, and/or quality of service. Applicant fails to provide information in the specification that describes how two restaurants are unrelated. Therefore, USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. See *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Also see *In re Zletz* 13 USPQ2d 1320 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow...") and *In re Pearson*, 181 USPQ 641 (CCPA 1974) (Claims in a pending application should be given their broadest possible interpretation). Using a broad and reasonable

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interpretation, two restaurants can be unrelated if they have a different address. For example, two restaurants may have a different and unrelated street name, city, street number, and zip code.

One skilled in the art would recognize that individuals often eat a wide range of food types at different restaurants. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the dining preferences of Grimes to have included dining preferences for a set of different and unrelated restaurants for the advantage of conveniently storing preferences for all restaurants that a user plans to visit on one card. It is noted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

#### Appellant Argument II

Appellant argues that there is no teaching of storing both a restaurant name and a food item name on the smart card in Grimes. Appeal Brief for Appellant, pg. 10.

As discussed in the KSR International Co. v. Teleflex Inc. et al., 550 U.S. \_\_\_\_(2007), "[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See In

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re Kahn, 441 F. 3d 977, 988 (CA Fed. 2006) ('[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness'). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ" (emphasis added).

In the present case, Grimes teaches the known element of a restaurant name (Grimes: paragraph 0012; A user enters a particular restaurant for which food and services are desired.). Grimes further teaches the known element of diner information and meal preferences for the particular restaurant (Grimes: paragraph 0012). Grimes further teaches the known element of storing information (diner information and meal preferences) on a smart card (Grimes: paragraph 0012; One skilled in the art would recognize that meal preferences often include a food item name.). Lastly, Grimes further teaches the element of providing a plurality of restaurants with a host of customer preference data (Grimes: paragraph 0013). From these teachings, it would have been obvious to a person of ordinary skill in the art to combine these known elements to assemble Appellant's invention to achieve a predictable result and an improved system. Storing the restaurant name and the food item on the smart card would have been recognized by those of ordinary skill in the art as resulting in an improved system that would provide the customer greater flexibility when choosing a dining option.

Appellant Argument III

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Appellant argues "[While] Elliott may describe *reading* information in this cited passage, there is no teaching or suggestion of any ability to <u>write dining preferences</u> to the smart card <u>using a radio frequency transceiver</u>, as expressly recited in Claim 6." As a result, Appellant submits that the Examiner has failed to establish a prima facie showing of obviousness. Appeal Brief for Appellant, pgs. 10-11.

It is important to note that Grimes teaches writing dining preferences to the smart card (Grimes: paragraphs 0012-0013). Grimes does not teach writing preferences using a radio frequency transceiver. However, Elliott teaches using radio frequency technology to read and write information on a tag (Elliott: see at least col. 2, lines 30-36; col. 5, lines 24-27; col. 8, lines 19-25 and 35-45; It is inherent that a transceiver/communication device is used to write information on RF tag 104.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method and system of Grimes to have included reading information from a card using radio frequency signals and a radio frequency transceiver that reads and writes information to the card as disclosed by Elliott for the advantage of transferring information from a card via a signal as opposed to physically swiping a card using a card reader. Thus, it is the combination of Grimes in view of Elliott that teaches all of the above-mentioned limitations. Furthermore, in response to Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

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Moreover, Elliott teaches a known technique of using radio frequency signals to read and write information in a tag as evidenced above. This known technique is applicable to the method and system of Grimes as they both share characteristics and capabilities, namely, they are directed to the transmission of data to and from a memory card. One of ordinary skill in the art would have recognized that applying the known technique of Elliott would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the technique of Elliott to the teachings of Grimes would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data transmission means on a memory card into similar systems. Further, applying radio frequency signals to read and write information to Grimes with dining preference data stored accordingly, would have been recognized by those of ordinary skill in the art as resulting in an improved system that would allow a more efficient and user-friendly transfer of dining preferences to the smart card.

#### Appellant Argument IV

Appellant argues "Still further, per the teachings of the cited Elliott reference, and directly tied to the overall architecture provided by the Elliott teachings, the so-called 'default menu' for placing an order is only with respect to a given restaurant (and thus is not interoperable between a multitude of different and unrelated restaurants)." Appellant further submits, "While Elliott also nominally mentions use of an active RFID in other, different applications, this tag description does not provide any type of multi-vendor interchange

capabilities or memory read/write capability with respect to restaurants or customer food preferences." Appeal Brief for Appellant, pg. 11.

It is submitted that Appellant raises issues that are not particularly relevant. As discussed above in the Examiner's response to argument III, Grimes teaches and/or suggests the method and system for storing diner information and meal preferences for a plurality of restaurants on a smart card (see citations above). Elliott is relied upon to teach the use of radio frequency signals as an improved data transmission means (see citations above). The other features and system architecture of Elliott are not combined with the teachings of Grimes. It would have been obvious to one of ordinary skill in the art at the time of the invention to have included radio frequency signals to read and write information from a memory card as discussed by Elliott in the system executing the method of Grimes. As in Elliott, it is within the capabilities of one of ordinary skill in the art to add radio frequency components to Grimes' dining preference smart card with the predicted result of efficiently transmitting dining preference information as needed in Grimes.

# Appellant Argument V

Appellant argues, "[There] would have been no reason or desire for a person of ordinary skill in the art, when presented with the Elliott teachings, to somehow re-architect the entire Elliott system to provide a de-centralized system where customer food preferences are distributed to or maintained by each customer individually." Appeal Brief for Appellant, pg. 12.

The Examiner notes, the complete system architecture in Elliott is not combined with the system of Grimes. Elliott is relied upon only to teach the specific limitations of using radio

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frequency technology to read and write from a memory card, displaying the dining preferences at the restaurant, and generating the order using the dining preferences. See art rejection and response to arguments above for citations. Thus, the reason or desire for a person of ordinary skill in the art to re-architect the entire Elliott system is not a relevant issue. Only the above-mentioned limitations taught by Elliott are combined with Grimes for the reasons set forth in the art rejection and response to arguments above.

# Appellant Argument VI

Appellant argues "[A] person of ordinary skill in the art would not have been motivated to modify such Elliot teachings in accordance with the missing claimed features recited in Claim 6, which are (1) reading customer dining preferences for the restaurant from a memory in the smart card, wherein the memory includes dining preferences for food items for a set of different and unrelated restaurants, wherein the dining preferences (i) are customer-portable between the set of different and unrelated restaurants, (ii) are read from the smart card using radio frequency signals, and (iii) are stored in association with a <u>restaurant name and a food item name also stored in the smart card</u>, (2) displaying the dining preferences for the restaurant on a display for <u>order verification by both the employee and the customer</u>, wherein other dining preferences maintained in the smart card for other restaurants are not displayed; and (3) a smart card that comprises a communications interface, wherein the communications interface allows for the dining preferences to be read from the memory by a data processing system at the restaurant for use in generating the food order, wherein the communications interface is a radio frequency transceiver that uses the radio frequency signals to read the restaurant dining preferences from

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the smart card and write the restaurant dining preferences to the smart card." Appeal Brief for Appellant, pg. 12.

This statement is incorrect because the Elliot reference is not being modified. The primary reference of Grimes is modified to include the missing claimed features that are taught by Elliott. The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In addition, it is important to note that "a person of ordinary skill in the art is also a person of ordinary creativity, not an automaton." KSR International Co. v. Teleflex Inc., 550 U.S. \_\_\_\_\_, 82 USPQ2d1385, 1397 (2007). "[I]n many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." Id. Office personnel may also take into account "the inferences and creative steps that a person of ordinary skill in the art would employ." Id. at , 82 USPQ2d at 1396. In the present case, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Grimes and Elliott for the reasons set forth in the art rejection and response to arguments above.

#### (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the Examiner in the Related Appeals and Interferences section of this Examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Eric Liou/

Examiner, Art Unit 3628

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